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(74) Agents: **BATTIPEDE, Francesco** et al.; Pirelli S.p.A., Viale Sarca, 222, I-20126 Milano (IT).

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(71) Applicant (*for all designated States except US*): **PIRELLI S.P.A.** [IT/IT]; Viale Sarca, 222, I-20126 Milano (IT).

(72) Inventors; and

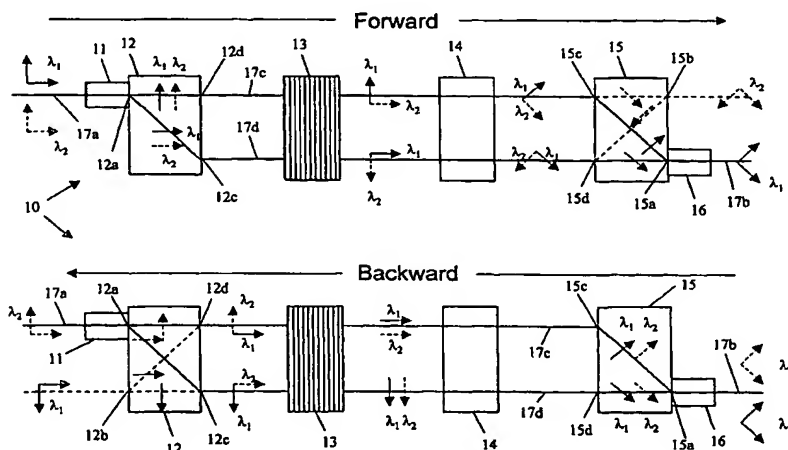
(75) Inventors/Applicants (*for US only*): **GHIDINI, Silvia** [IT/IT]; Via San Gottardo, 8, I-20052 Monza (IT). **SOCCHI, Luciano** [IT/IT]; Via Nota, 41, I-20126 Milano (IT). **ROMAGNOLI, Marco** [IT/IT]; Via della Moscova, 66, I-20121 Milano (IT). **FRANCO, Pierluigi** [IT/IT]; Via Cernaia, 36, I-35100 Padova (IT).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OPTICAL DEVICES COMPRISING SERIES OF BIREFRINGENT WAVEPLATES



(57) Abstract: Bidirectional isolating devices including non-reciprocal rotators (i.e. Faraday rotators) and wavelength selective reciprocal polarization rotators are disclosed. Each wavelength selective rotator behaves like a half-wave retarder in a first frequency range and behaves like a full-wave retarder in a second frequency range, according to a substantially periodic transfer function. More particularly, it comprises a predetermined number of birefringent elements (e.g. waveplates), the thickness and the orientation of which are chosen so as to obtain a transition between the half-wave retarder behavior and the full-wave retarder behavior in a frequency range lower than or equal to the 40% of the period of the transfer function. In order to satisfy such a requirement a relatively high number of birefringent elements is required, i.e. at least five birefringent elements. Advantageously, the isolating device may comply with any allocation scheme for the opposite propagating signals.

# INTERNATIONAL SEARCH REPORT

International Application No

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G02F1/09

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 982 620 A (FUJITSU LTD) 1 March 2000 (2000-03-01) page 2, line 53 -page 4, line 29; figure 3	1
A	EP 1 079 249 A (JDS UNIPHASE INC) 28 February 2001 (2001-02-28) abstract; figure 1A	1

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Further documents are listed in the continuation of box C.

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Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Gill, R

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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EP 1079249	A	28-02-2001	US 6268954 B1	31-07-2001
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